



DEFENSE HEALTH BOARD  
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SEP 18 2009

DHB

MEMORANDUM FOR: ELLEN P. EMBREY, DEPUTY ASSISTANT SECRETARY  
OF DEFENSE (FHP&R), PERFORMING THE DUTIES OF THE ASSISTANT  
SECRETARY OF DEFENSE FOR HEALTH AFFAIRS

SUBJECT: Defense Health Board Findings Pertaining to Autism Treatment

1. References:

- a. Report of the ECRI Institute Health Technology Assessment Service Comprehensive Educational and Behavioral Interventions for the Treatment of Autism Spectrum Disorders: Prepared for the Department of Defense TRICARE Management Activity, 25 November 2008.
- b. Presentation: Applied Behavioral Analysis, to the Defense Health Board, CAPT Robert DeMartino, Director, Behavioral Medicine Division, Office of the Chief Medical Officer, TRICARE Management Activity, 5 September 2008.
- c. Memorandum, DASD (C&PP), Request to the Defense Health Board Pertaining to Autism Treatment, 26 August 2008.
- d. TRICARE Management Activity, TRICARE Operations Manual 6010.51M, 1 August 2002.

2. At the request of Dr. Joseph E. Kelley, Deputy Assistant Secretary of Defense for Health Affairs, Clinical and Program Policy, the Defense Health Board was asked to examine the following:

- a. The scientific evidence surrounding applied behavioral analysis (ABA) therapy, including the benefits, treatment intensity and duration, as well as short-term and long-term effects associated with this treatment.
- b. Areas for further research.
- c. The existence of emerging treatments for autism that provide comparable benefit to ABA therapy.

3. The Board received a presentation from a Department of Defense (DoD) subject matter expert and public comments during the open session of the DHB Full Board meeting on 5 September 2008 and discussed methods of assessing the issue. The DHB President

subsequently tasked the Psychological Health External Advisory Subcommittee to thoroughly review the literature on autism and its treatments including ABA, and report its findings and recommendations to the Core Board. A list of additional references identified by a review of the literature is attached.

4. The Psychological Health External Advisory Subcommittee held a meeting on 26 to 27 January 2009, during which the Subcommittee members discussed the findings and implications of an evidence-based review of broad behavioral and educational interventions for the treatment of autism spectrum disorders (ASDs), prepared by the ECRI Institute. In addition, the Subcommittee held a telephonic meeting on 19 May 2009 during which the members received a briefing on the TRICARE autism benefit.

## FINDINGS

5. ASDs are disorders of brain development associated with problems in the regulation of emotion, cognition, and behavior that may result in profound developmental impairments, and social, academic, and vocational disability.
6. ABA is a type of Early Intensive Behavioral Intervention (EIBI).
7. A paucity of data resulting from few studies, small sample sizes, problems in experimental design within existing studies, as well as lack of long-term follow-up, exists that could inform questions and provide answers related to the absolute and relative effectiveness of ABA for ASD.
8. The Subcommittee recognizes that military families face limitations and widespread geographic disparities in gaining access to pharmacologic and psychosocial habilitative treatments for ASD. It also recognizes that many families feel they are benefitting from current services, even if limited.

## CONCLUSIONS

9. The Board appreciates the opportunity to provide input on the important issue of ABA treatment for autism spectrum disorders (ASD). However, the principal factor limiting the ability of the Board to draw firm conclusions regarding the relative efficacy of ABA is the lack of sufficient sound and thorough peer-reviewed evidence on this issue.

## RECOMMENDATIONS

10. **ASDs require the integration of habilitative treatments as a minimum acceptable standard for management of the illness and its consequences.**
11. **Regarding short-term effects of treatment associated with ABA: evidence exists to conclude that EIBI of which ABA is one example may produce short-term gains in intelligence quotient (IQ) and adaptive behavior, but not improvements in other symptoms or dimensions of functional impairment in individuals with ASD.**



12. **Regarding long-term effects of treatment associated with ABA:** insufficient evidence exists to draw conclusions regarding the long-term efficacy of any current intervention strategies.
13. **Regarding the comparative effectiveness of treatments other than ABA:** insufficient evidence exists to draw conclusions regarding the relative efficacy of ABA and other forms of EIBI.
14. Rigorously-designed clinical trials addressing the shortcomings of the literature are recommended to support future evidence-based recommendations. These include especially comparisons of various treatments and interventions in the short and in the long term. Establishing partnerships with relevant organizations to accomplish this, such as with the National Institutes of Health, is desirable.
15. The Board endorses the notion that families receiving ASD-related services from the DoD or supported by the DoD should be encouraged to participate in longitudinal and other research designed to address the shortcomings in the literature.
16. The Board endorses the implementation of individualized child, adolescent and family-focused case management strategies that take into account regional variability in treatment resources.
17. These recommendations should be reviewed two to three years from the date of this memorandum.

FOR THE DEFENSE HEALTH BOARD:



Wayne M. Lednar, M.D., Ph.D.  
DHB Co-Vice-President



Gregory A. Poland, M.D.  
DHB Co-Vice-President



Charles Fogelman, PhD  
Chair, Psychological Health External Advisory Subcommittee

Attachment(s):  
As stated

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**Distribution List**

DASD (FHP&R)  
DASD (C&PP)  
DHB Members and Consultants  
Surgeon General of the Army  
Surgeon General of the Navy  
Surgeon General of the Air Force  
Joint Staff Surgeon  
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